



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,344	12/01/2003	Luis Serra	57450/1181	5251

35743	7590	07/17/2007
KRAMER LEVIN NAFTALIS & FRANKEL LLP		
INTELLECTUAL PROPERTY DEPARTMENT		
1177 AVENUE OF THE AMERICAS		
NEW YORK, NY 10036		

EXAMINER
NGUYEN, PHU K

ART UNIT	PAPER NUMBER
2628	

NOTIFICATION DATE	DELIVERY MODE
07/17/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

klpatent@kramerlevin.com

Office Action Summary	Application No. 10/727,344	Applicant(s) SERRA ET AL.	
	Examiner Phu K. Nguyen	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Phu K. Nguyen
PHU K. NGUYEN
PRIMARY EXAMINER
GROUP 2300

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-9, 11-18 and 20-26, 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al (U.S. Patent No. 5,588,098).

As per independent claim 1, Chen et al teach a method of interactively visualizing 3D data display comprising a step of displaying data in a 3D data set in an overview mode (Fig.3), where localization markers can be set, deleted, manipulated and viewed (Figs.4 and 11, i.e., located at the corners of the bounding box; col.11, lines 1-6) and a step of displaying data in a local mode where data in an interest region surrounding a localization marker are rendered using different display parameters than those of the overview mode (col.7, lines 8-14, i.e., clicking and dragging one of those markers will cause the system to re-scale and display the selected region in another mode, i.e., "local mode" using different display parameter, i.e., enlarged or reduced sizes) wherein the localization markers can be set, deleted and manipulated by a user at any point within the 3D set (the selection of the local markers; column 19, lines 28-44); and "wherein the local display mode is initiated by a user performing a defined action at the

time of visualizing the data" (Chen, column 5, lines 32-47; the selection of interesting region).

RESPONSE TO APPLICANT'S ARGUMENTS

Applicant's arguments filed April 19, 2007 have been fully considered but they are not deemed to be persuasive.

Applicant argues that "Chen does not teach or suggest the method of amended claim 1. In Chen the objects to be manipulated are defined a priori. Moreover, each such predefined object has an associated fixed and also predefined bounding box. Throughout Chen the objects and their associated bounding boxes are never user defined or even modifiable. Each bounding box has a set of "sensitive areas" or "active zones" which can be selected and used to manipulate the object within the bounding box, as shown in Fig. 4. There is no teaching in Chen of a local display mode being initiated by a user action at the time of visualization. " which is not correct. Chen's user is also able to select a portion of interest through a finite bounding box (Chen, objects could be individually selected; column 19, lines 31-33); in other words, in an overview mode, which is a dining room containing sofa, buffets, table, chairs, the user initiates a selection process (column 5, lines 32-47) to pick up the chair to view in a local mode, in which the chair is selected by the user at the time of visualization.

Claim 29 adds into claim 1 "wherein said user action includes at least one of causing a virtual tool, a cursor, or other indicator to come within a defined distance of a

localization marker, and articulating a vocal command" (Chen, cursor is used as marker in the object selection; column 5, lines 32-47).

As per dependent claim 2, Chen et al further teach wherein the display parameters provide greater detail (col.7, lines 8-14, i.e., different size due to the scaling or different view point due to the rotation).

As per dependent claim 3, Chen et al further teach wherein the greater detail includes one of enlargement or display of additional or alternate properties of the data according to a defined representation scheme (col.7, lines 8-14).

As per dependent claim 4, Chen et al further teach wherein the different display parameters include a scale change (col.7, lines 8-14).

As per dependent claim 5, Chen et al further teach the local mode display uses one of the localization markers or an user-designated point as a center of scaling (col.7, lines 51-58).

As per dependent claim 6, Chen et al further teach wherein the local mode display moves the center of scaling to an optimum viewing point in the display (col.11, lines 6-39).

As per dependent claims 7-8, Chen et al further teach the features as now claimed at col.6, line 57 through col.7, line 3 and col.9, lines 20-23).

As per dependent claim 9, Chen et al further teach a step of stepping through local mode displays of all current detail regions (col.7, lines 8-14).

As per dependent claim 11, Chen et al further teach wherein the boundaries of a region of interest are controlled by the user (col.5, lines 1-9).

As per dependent claim 12, Chen et al further teach wherein the user may set and adjust parameters governing region of interest boundaries globally or specifically to each individual region of interest (col.7, lines 8-21).

As per dependent claim 13, Chen et al further teach wherein a user may modify region of interest boundaries in overview mode, in local mode or in both (col.4, line 62 through col.5, line 9).

As per dependent claim 14, Chen et al further teach wherein in overview mode the localization markers are displayed using an indication icon (Figs.3-4).

As per dependent claim 15, Chen et al further teach wherein in overview mode, boundaries of the region of interest surrounding each potential localization marker point are displayed such that a user can see what a given region of interest would contain (Fig.11, 3, col.6, line 57 through col.7, line 7).

As per dependent claim 16, Chen et al further teach wherein in overview mode, a localization marker is displayed at point (Fig.11).

As per dependent claim 17, Chen et al further teach the features as now claimed at Fig.3 and 11, col.7, lines 8-41.

As per dependent claim 18, Chen et al further teach wherein the viewing potential region of interest, a user can change its shape (col.5, lines 5-23).

As per dependent claim 20, Chen et al further teach the features as now claimed at Figs.12-13.

As per dependent claim 21, Chen et al further teach wherein each region of interest associated with each localization marker can have unique boundaries of arbitrary shape (col.5, lines 5-23).

Claims 22-26, 30-31 are similar to claims 1, 2, 13, 17 and 29, Chen et al further teach a computer program product stored in a computer storage device causing the computer system to perform such steps claimed in claims 22-26 at column 4, lines 38-40.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (U.S. Patent No. 5,588,098).

Claims 27 and 28 add into claim 1 a sub-local mode which is a further extension of the local mode which Chen does not explicitly teach. However, it would have been obvious to use the Chen's selection tool to secondly select another region within the first selected region to create a sub-local region within a local region because Chen selection box can be used for any object displayed on the screen including both the whole room, or the selected object within the room.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (U.S. Patent No. 5,588,098) in view of Sato et al (U.S. Patent No. 6,826,297).

As per dependent claim 10, it should be noticed that Chen et al fail to implicitly teach a step of simultaneously displaying the non-selected portions of the model in over view mode while displaying the selected portion of the model in the local

mode. However, Sato et al teach another 3D display system for displaying a three dimensional image in a plurality of views simultaneously on the display screen as now claimed (Fig.1, 40, co1.4, lines 60=63). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the concept of simultaneously displaying the model in a multiple views as taught by Sato et al into Chen et al system in order to make it more efficient and user friendly since it would have allowed the user to see how the selected portion would be fitted into the model while manipulating it as now claimed.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (U.S. Patent No. 6,178,358) in view of Yamada (U.S. Patent No. 5,422,987).

As per claim 19, it should be noticed that Chen et al fail to implicitly a step of moving the region of interest, i.e., view, as the user moves a cursor through the model. However, Yamada teaches another data processing method and system for changing the perspective view of a 3D object image including a step of moving the region of interest in response to the user moving a cursor through the 3D model at co1.2, lines 35-46. It would have been obvious to one of ordinary skill in the computer art at the time the invention was made to implement the step of moving the region of interest according to the user moving a cursor on the 3D model as taught by Yamada into Chen et al system in order to make it more user friendly since it would have provided easiness to

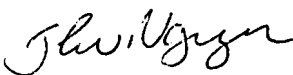
the user in observing different views of the 3D object by simply moving the mouse cursor to the desired viewing angle as now claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu K. Nguyen whose telephone number is (571) 272 7645. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272 7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phu K. Nguyen
July 2, 2007


**PHU K. NGUYEN
PRIMARY EXAMINER
GROUP 2300**